



SPEAKER SYSTEM

AX10/AX12/AX15 AX12M/AX15M

SUBWOOFER

AX15W

Owner's Manual

Thank you for choosing the YAMAHA speaker system. In order to take maximum advantage of the speaker's features and ensure maximum performance and longevity, please read this manual carefully before using the speaker system. Keep the manual in a safe place for future reference.

Contents

<i>PRECAUTIONS</i>	3
<i>Before Making Connections</i>	4
<i>Specifications</i>	5

Bedienungsanleitung

Wir beglückwünschen Sie zum Kauf dieses YAMAHA-Lautsprechersystems. Damit Sie die Ausstattungen dieses Lautsprechersystems optimal nutzen können, und um maximale Leistung und Lebensdauer sicherzustellen, lesen Sie bitte vor der Inbetriebnahme diese Anleitung sorgfältig durch. Bitte bewahren Sie diese Bedienungsanleitung gut auf, um bei Bedarf darauf zurückgreifen zu können.

Inhalt

<i>VORSICHTSMASSNAHMEN</i>	6
<i>Vor dem Anschließen</i>	7
<i>Technische Daten</i>	8

Mode d'emploi

Nous vous remercions d'avoir acheté les enceintes YAMAHA. Pour obtenir les performances optimales de vos enceintes et garantir une longévité maximale, lisez attentivement ce mode d'emploi avant d'utiliser les enceintes. Conservez-le en lieu sûr pour pouvoir vous y référer ultérieurement.

Table des matières

<i>PRECAUTIONS D'USAGE</i>	9
<i>Avant d'effectuer les connexions</i>	10
<i>Fiche technique</i>	11

Manual de instrucciones

Gracias por escoger el sistema de altavoces YAMAHA. A fin de aprovechar al máximo las características de los altavoces y obtener un rendimiento y durabilidad óptimos, lea atentamente este manual antes de utilizar el sistema. Guarde este manual en un lugar seguro para futuras consultas.

Índice

<i>PRECAUCIONES</i>	12
<i>Antes de efectuar conexiones</i>	13
<i>Especificaciones</i>	14

ENGLISH

DEUTSCH

FRANÇAIS

ESPAÑOL

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual in a safe place for future reference.

WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Do not open

- Do not open the device or attempt to disassemble the internal parts or modify them in any way. The device contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the device or other property. These precautions include, but are not limited to, the following:

Location

- If you use a stand, check the stand's specifications and make sure that it is sturdy enough to support the weight of the speaker. You may need to limit the number of people around the placed stand, in order to avoid toppling the device or causing damage to the internal components.
- If you use the TS-80 and TS-90 speaker stands manufactured by Ultimate Systems (sold separately) to support the AX10/AX12/AX15/AX12M/AX15M speaker models, be sure to keep the following cautions.
 - Use the speaker stands with their legs fully opened.
 - Place only one speaker on each speaker stand.
 - Tighten fastening screws securely.
 - Remove the speakers from the stands before moving the stands or adjusting their height.
 - Add weight such as sand bags around the stand legs to prevent them from falling over.
 - Use the stand at a maximum height of 140 cm.
- If you use a metal socket of the AX15W subwoofer to allow mounting of a satellite speaker, use a pole shorter than 90cm with an outer diameter of 35mm.
- When transporting or moving the device, always use two or more people.
- Before moving the device, remove all connected cables.
- Do not expose the device to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not place the device in an unstable position where it might accidentally fall over.

Water warning

- Do not expose the device to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.

Connections

- Before connecting the device to other devices, turn off the power for all devices. Before turning the power on or off for all devices, set all volume levels to minimum.
- Use only speaker cables for connecting speakers to the speaker jacks. Use of other types of cables may result in fire.
- Be sure to observe the amplifier's rated load impedance (see page 5), particularly when connecting speakers in parallel. Connecting an impedance load outside the amplifier's rated range can damage the amplifier.

Handling caution

- Always turn AC power to the power amplifier on last in any audio system to avoid speaker damage. When turning power off, the power amplifier should be turned off first for the same reason.



This product, when used in combination with amplification and/or additional loudspeakers, may be capable of producing sound levels that could cause permanent hearing loss.

DO NOT operate at high volume levels or at a level that is uncomfortable. If you experience any discomfort or ringing in the ears, or suspect an hearing loss, you should consult an audiologist.

To protect your speakers

When choosing a power amplifier to use with your speakers, make sure that its power output matches the speakers' power capacity (refer to the Specifications on page 5). Even if the amplifier's power output is lower than the speakers' PGM (program) power capacity, the speakers may be damaged when clipping of a high input signal occurs.

The following may cause damage to speakers:

- Feedback caused when using a microphone.
- Continuous high sound pressure level produced by electronic instruments.
- Continuous high-power output distorted signals.
- Popping noises caused by turning on equipment, or by connecting or disconnecting system components while the amplifier is turned on.

Poly Switch

All full-range loudspeakers are fitted with a self-resetting poly switch that protects the high-frequency driver from damage caused by excessive power.

If a loudspeaker cabinet loses high-frequency output, immediately remove power from the unit and wait for two to three minutes. They should allow the poly switch to reset. Re-apply power and check the performance of the high-frequency driver before continuing with the power reduced to a level that does not cause the poly switch to interrupt the signal.

- In any system using two or more speakers, be sure to match the connection polarities of all speakers to the amplifier(s) — e.g. always connect “+” to “+” and “-” to “-”. If the polarities are not properly matched the speakers will be driven out of phase and the sound will suffer.
- Use only Neutrik NL4FC plugs for connecting Speakon connectors.

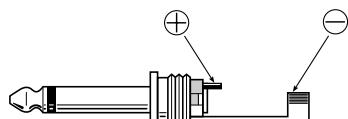
Yamaha cannot be held responsible for damage caused by improper use or modifications to the device.

- * Illustrations in this manual are for explanatory purposes only, and may not match the actual appearance of the product during operation.
- * Company names and product names used in this Owner's Manual are trademarks or registered trademarks of their respective owners.

Before Making Connections

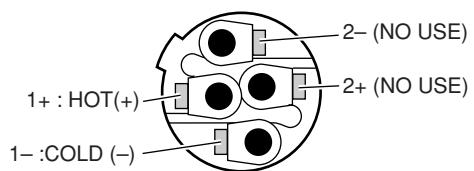
■ Phone Plug Wiring

Phone plugs for connection to the phone jack inputs should be wired as shown to the right. Be sure to use proper speaker cable — NOT shielded instrument or line cable — for all speaker connections.



■ Neutrik NL4FC Plug Wiring

If you will be using the Neutrik connectors for speaker input, wire the plugs as shown to the right. Be sure to use proper speaker cable — NOT shielded instrument or line cable — for all speaker connections.



■ Subwoofer Parallel-connection

The subwoofer AX15W features four input/parallel connectors—two 1/4" phone jacks and two Neutrik NL4MP connectors. Use either a phone jack or a Neutrik connector to receive input from your sound system/power amplifier. One of the spare connectors can be used to parallel-connect an additional main speaker (keeping in mind the impedance considerations mentioned below).

■ Impedance Considerations

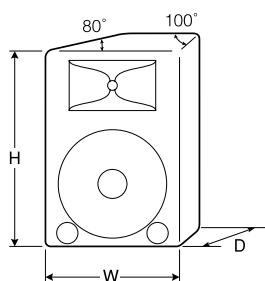
When connecting speakers in parallel be sure to check the rated load impedance of the power amplifier. Most power amplifiers are capable of safely driving speakers with minimum impedance of 8 ohms or 4 ohms. A pair of parallel-connected 8-ohm speakers have a total impedance of 4 ohms. The AX10/AX12/AX15/AX12M/AX15M are 8-ohm speakers, and two of these can safely be paralleled on one output. Two or more speakers can be connected in parallel, however, if you are using a power amplifier that can safely drive load impedances of 4 ohms or lower.

Specifications

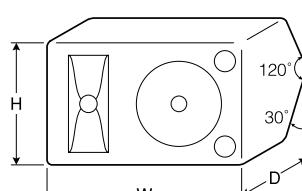
Model	AX10	AX12	AX15	AX12M	AX15M	AX15W
Enclosure	2 way Bass reflex type				Bass reflex type	
Speaker Unit	LF	10" cone	12" cone	15" cone	12" cone	15" cone
	HF	1" VC, Horn-TW				—
Frequency Response	65Hz-20kHz		60Hz-20kHz			
Power Capacity	NOISE*	125W	150W	200W	150W	200W
	PGM	250W	300W	400W	300W	400W
	MAX	500W	600W	800W	600W	800W
Nominal Impedance	8Ω					
Sensitivity	96dB SPL (1W, 1m)	97dB SPL (1W, 1m)	98dB SPL (1W, 1m)	97dB (1W, 1m)	98dB SPL (1W, 1m)	97dB (1W, 1m)
Input Connectors	1/4" phone jack × 1, SPEAKON Neutrik NL4MP × 1					1/4" phone jack × 2, SPEAKON Neutrik NL4MP × 2
Dimensions (W×H×D)	385 × 538 × 297	405 × 578 × 313	470 × 668 × 375	578 × 405 × 325	668 × 470 × 355	485 × 618 × 505
Weight	12.5kg	16.5kg	21.5kg	16.5kg	20kg	26.5kg

*: EIA RS-426

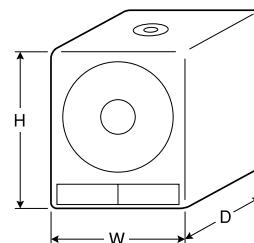
AX10/AX12/AX15



AX12M/AX15M



AX15W



Unit: mm

Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.

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